

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056**

Exemption No. 5426

In the matter of the petition of

Evergreen International Airlines

Regulatory Docket No. 26814

for an exemption from § 121.314
of the Federal Aviation Regulations

PARTIAL GRANT OF EXEMPTION

By letter dated March 17, 1992, Kirk Carrillo, Systems Engineering, Evergreen International Airlines (EIA), petitioned for exemption from § 121.314 of the Federal Aviation Regulations (FAR) to permit a 120-day extension in the compliance time for the retrofit of Class D cargo compartment liners in Boeing Model 727-100 airplanes. By letters dated November 20, 1990, and February 7, 1991, Mr. Joseph D. Vreeman, Vice President, Engineering and Maintenance, Air Transport Association of America (ATA), petitioned for exemption from §§ 121.314 and 135.169(d) of the FAR to permit up to a 36-month extension in the compliance time for the retrofit of Class C and D cargo compartment liners. The petition was on behalf of all affected operators, and was partially granted in Exemption 5288. The time extension for the Model 727 airplanes expires on March 20, 1992.

Section of the FAR affected:

Section 121.314, as amended by Amendment 121-202, requires, in part, that after March 20, 1991, all Class C and D cargo compartments greater than 200 cubic feet in volume, used on airplanes in air carrier, air taxi, and commercial service, have liners constructed of fiberglass or material satisfying the test requirements of § 25.855, as amended by Amendment 25-60, or, in the case of liners approved prior to March 20, 1989, aluminum. It must be noted that liners constructed of fiberglass, if not previously type certificated for use in the airplane model involved, must be shown to comply with the regulations incorporated by reference in the type certificate for that model.

ANM-92-023-E

Related Section of the FAR:

Section 25.855(a-1)(1), as amended by Amendment 25-60, incorporates a new flame penetration test using an oil burner. Unlike § 121.314 which permits the use of fiberglass or aluminum construction, § 25.855(a)(1) requires this test of all liner materials in Class C and D cargo compartments on affected airplanes, regardless of whether or not the material is fiberglass. These test standards are contained in Appendix

F, Part III, of Part 25. Except to the extent it is incorporated by reference in § 121.314, this section applies only to transport category airplanes for which an application for type certificate is made after June 15, 1986.

The petitioner's supportive information is as follows:

"The referenced FAR requires upgrade to the compartment liners in class 'C' and 'D' cargo compartments on or before March 20, 1992. Evergreen International Airlines has encountered a problem in one area on some of our 727 aircraft.

"The 727 aircraft have class 'D' compartments. These cargo compartments were originally delivered with liners on the walls and ceilings that meet the intent of FAR 121.314. EIA has already accomplished all required repairs to existing liner patches by either replacing the liners with new, or by utilizing the 'Steward Patch' which is FAA approved and meets 121.314.

"The final area of concern on 727 aircraft is the liner on the inside surface of the cargo compartment doors. The original Boeing delivered material does not meet 121.314. For this reason, Boeing issued the reference Service Letter (SL) to instruct airlines on a method to cover the compartment doors with an approved liner material. EIA used the SL to create our own engineering order which is referenced above. During a 'C' check on one of our aircraft, we fabricated a test article liner and installed it. When all was deemed satisfactory, EIA patterned this cover and made several so that they could be installed in the field as time was of the essence.

"Upon attempting to comply with the first field installation a problem turned up. It appears that there is a second configuration of cargo door which the Boeing SL did not cover. To use our patterned liner on these doors would require significant rework of the liner due to additional structure, brackets, etc. This liner modification cannot be accomplished in the field as special sewing and similar skills are required. Since the first airplane had the simpler style door (as discussed in the SL) we expected them all to be this configuration. We were wrong.

"EIA will require enough time to schedule one of these aircraft with the alternate configuration doors into a maintenance facility to allow a new pattern to be made. For this reason, EIA requests an extension of 120 days from March 20, 1992 for the installation of liners on the inside of the lower cargo compartment doors."

The FAA finds, for good cause, that action on this petition should not be delayed for publication and comment procedures for the following reasons:

(1) a grant of exemption would not set a precedent in that this matter involves circumstances of this industry's efforts to achieve compliance prior to the deadline established by the regulation; and (2) delay in acting on the petition would be detrimental to the petitioner in that it could result in

removal of aircraft from service. The FAA was first made aware of the extent of compliance problems with this regulation by means of petitions for exemption filed by the Air Transport Association and the Regional Airline Association in late 1990. Exemptions were granted to those organization (on behalf of affected operators) with the understanding that service information would be forthcoming from the airframe manufacturers as needed to achieve compliance. The compliance deadlines, as stated in those exemptions, were based on the scheduled release dates of service information and the associated time required to implement the modifications.

The Federal Aviation Administration's analysis/summary is as follows:

The petitioner's request is limited to an extension of the compliance time, as already extended by Exemption 5288 granted to ATA.

The petitioner, in an effort to comply with the regulations, scheduled modifications to take place in accordance with that extension of the exemption. A door liner design was developed for all the petitioner's aircraft in accordance with Boeing Service Letter 727-SL-25-29-B, and using the Boeing Illustrated Parts Catalog (IPC) and an aircraft from their existing fleet. However, neither the Service Letter nor the Boeing IPC identify modifications to the cargo doors resulting from Service Bulletins. Thus, the cargo door liner designed to the standard door configuration would not fit the doors on other aircraft in the fleet with these Service Bulletin modifications installed. Since the door opens upward and inward, the door configurations are not normally visible unless specific efforts are taken to view them. We conclude that EIA made all reasonable efforts to identify the configurations subject to modification. Since this second door design, not covered by the airplane manufacturer's service letter, must be accommodated, the petitioner must now duplicate part of the effort expended for the first design.

The FAA understands that the petitioner is currently concerned about an active fleet of six (6) 727 airplanes, two of which have the original door design, and which have been modified, and four of which have the alternative door design, and which are not modified.

The petitioner has requested 120 days in addition to the time already granted in Exemption 5288. The FAA considers that a maximum of an additional sixty (60) days should be sufficient for the petitioner to gain access to one of the four airplanes in need of the replacement, create the pattern for the door liner, produce the liners for four airplanes from material already in stock , and install the liners on four airplanes.

In consideration of the foregoing, I find that a grant of exemption is in the public interest and will not affect the level of safety provided by the regulations. Therefore, pursuant to the authority contained in §§ 313(a) and 601(c) of the Federal Aviation Act of 1958, delegated to me by the Administrator (14 CFR 11.53), Evergreen International Airlines is hereby granted an exemption to permit operation, under the provisions of Part 121 of

the FAR, of airplanes that do not comply with the provisions of § 121.314 of those parts. The following limitations apply to this exemption:

1. This exemption is limited to Boeing Model 727 airplanes.
2. This exemption expires on May 19, 1992.

All other provisions of Exemption 5288, together with its conditions and limitations, remain the same and are applicable to this exemption.

Issued in Renton Washington, on

Darrell M. Pederson
Acting Manager,
Transport Airplane Directorate
Aircraft Certification Service

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